\_\_\_\_\_\_

Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2009; month=6; day=25; hr=7; min=25; sec=0; ms=647; ]

\_\_\_\_\_\_

## Validated By CRFValidator v 1.0.3

Application No: 10586701 Version No: 2.0

0

Input Set:

Output Set:

**Started:** 2009-06-16 11:09:43.330 **Finished:** 2009-06-16 11:09:44.927

**Elapsed:** 0 hr(s) 0 min(s) 1 sec(s) 597 ms

Total Warnings: 12

No. of SeqIDs Defined: 19

Actual SeqID Count: 19

Total Errors:

Error code		Error Description	
W	213	Artificial or Unknown found in <213> in SEQ ID (3)	
W	213	Artificial or Unknown found in <213> in SEQ ID (4)	
W	213	Artificial or Unknown found in <213> in SEQ ID (5)	
W	213	Artificial or Unknown found in <213> in SEQ ID (6)	
W	213	Artificial or Unknown found in <213> in SEQ ID (7)	
W	213	Artificial or Unknown found in <213> in SEQ ID (8)	
W	213	Artificial or Unknown found in <213> in SEQ ID (9)	
W	213	Artificial or Unknown found in <213> in SEQ ID (10)	)
W	213	Artificial or Unknown found in <213> in SEQ ID (11)	)
W	213	Artificial or Unknown found in <213> in SEQ ID (12)	)
W	213	Artificial or Unknown found in <213> in SEQ ID (13)	)
W	402	Undefined organism found in <213> in SEQ ID (14)	

## SEOUENCE LISTING

```
<110> Merck & Co., Inc.
     Filocamo, Gessica
     Steinkuhler, Christian
<120> INHIBITORS OF MAMMALIAN HDAC 11 USEFUL
 FOR TREATING HDAC 11 MEDIATED DISORDERS
<130> ITR0064YP
<140> 10586701
<141> 2009-06-16
<150> US 60/537,940
<151> 2004-01-21
<150> PCT/EP2005/000559
<151> 2005-01-18
<160> 19
<170> FastSEQ for Windows Version 4.0
<210> 1
<211> 1755
<212> DNA
<213> Homo sapiens
<400> 1
agetttggga gggeeggeee egggatgeta cacacaacee agetgtacea geatgtgeea 60
gagacaccct ggccaatcgt gtactcgccg cgctacaaca tcaccttcat gggcctggag 120
aagctgcatc cctttgatgc cggaaaatgg ggcaaagtga tcaatttcct aaaagaagag 180
aagettetgt etgacageat getggtggag gegegggagg eeteggagga ggaeetgetg 240
gtggtgcaca cgaggcgcta tcttaatgag ctcaagtggt cctttgctgt tgctaccatc 300
acagaaatcc ccccgttat cttcctcccc aacttccttg tgcagaggaa ggtgctgagg 360
ccccttcgga cccagacagg aggaaccata atggcgggga agctggctgt ggagcgaggc 420
tgggccatca acgtgggggg tggcttccac cactgctcca gcgaccgtgg cgggggcttc 480
tgtgcctatg cggacatcac gctcgccatc aagtttctgt ttgagcgtgt ggagggcatc 540
tecagggeta ceateattga tettgatgee cateagggea atgggeatga gegagaette 600
atggacgaca agcgtgtgta catcatggat gtctacaacc gccacatcta cccaggggac 660
cgctttgcca agcaggccat caggcggaag gtggagctgg agtggggcac agaggatgat 720
gagtacctgg ataaggtgga gaggaacatc aagaaatccc tccaggagca cctgcccgac 780
gtggtggtat acaatgcagg caccgacatc ctcgaggggg accgccttgg ggggctgtcc 840
atcageceag egggeategt gaagegggat gagetggtgt teeggatggt eegtggeege 900
cgggtgccca tccttatggt gacctcaggc gggtaccaga agcgcacagc ccgcatcatt 960
gctgactcca tacttaatct gtttggcctg gggctcattg ggcctgagtc acccagcgtc 1020
teegeacaga acteagacae accgetgett ecceetgeag tgeeetgace ettgetgeee 1080
tgcctgtcac gtggccctgc ctatccgccc cttagtgctt tttgttttct aacctcatgg 1140
ggtggtggag gcagccttca gtgagcatgg aggggcaggg ccatccctgg ctggggcctg 1200
gagetggeee tteetetaet ttteeetget ggaageeaga agggettgag geetetatgg 1260
```

gtgggggcag aaggcagagc ctgtgtccca gggggaccca cacgaagtca ccagcccata 1320 ggtccaggga ggcaggcagt taactgagaa ttggagagga caggctaggt cccaggcaca 1380 gcgagggccc tgggcttggg gtgttctggt tttgagaacg gcagacccag gtcggagtga 1440

ggaagettee acctecatee tgactaggee tgeatectaa etgggeetee eteecteee 1500 ttggteatgg gatttgetge eeteettigee ecagagetga agagetatag geactggtgt 1560 ggatggeeca ggaggtgetg gagetaggte teeaggtggg eetggtteee aggeageagg 1620 tgggaaceet gggeetggat gtgaggggeg gteaggaagg ggtacaggtg ggtteeetea 1680 tetggagtte eeeeteaata aageaaggte tggaeetgea aaaaaaaaa aaaaaaaaa 1740 aaaaaaaaaa aaaaa 1755

<210> 2

<211> 347

<212> PRT

<213> Homo sapiens

<400> 2

Met Leu His Thr Thr Gln Leu Tyr Gln His Val Pro Glu Thr Pro Trp 1 5 10 15

Pro Ile Val Tyr Ser Pro Arg Tyr Asn Ile Thr Phe Met Gly Leu Glu 20 25 30

Lys Leu His Pro Phe Asp Ala Gly Lys Trp Gly Lys Val Ile Asn Phe 35 40 45

Leu Lys Glu Glu Lys Leu Leu Ser Asp Ser Met Leu Val Glu Ala Arg
50 55 60

Glu Ala Ser Glu Glu Asp Leu Leu Val Val His Thr Arg Arg Tyr Leu
65 70 75 80

Asn Glu Leu Lys Trp Ser Phe Ala Val Ala Thr Ile Thr Glu Ile Pro 85 90 95

Pro Val Ile Phe Leu Pro Asn Phe Leu Val Gln Arg Lys Val Leu Arg 100 105 110

Pro Leu Arg Thr Gln Thr Gly Gly Thr Ile Met Ala Gly Lys Leu Ala 115 120 125

Val Glu Arg Gly Trp Ala Ile Asn Val Gly Gly Phe His His Cys 130 135 140

Ala Ile Lys Phe Leu Phe Glu Arg Val Glu Gly Ile Ser Arg Ala Thr 165 170 175

Ile Ile Asp Leu Asp Ala His Gln Gly Asn Gly His Glu Arg Asp Phe 180 185 190

Met Asp Asp Lys Arg Val Tyr Ile Met Asp Val Tyr Asn Arg His Ile 195 200 205

Tyr Pro Gly Asp Arg Phe Ala Lys Gln Ala Ile Arg Arg Lys Val Glu 210 215 220

Leu Glu Trp Gly Thr Glu Asp Asp Glu Tyr Leu Asp Lys Val Glu Arg
225 230 235 240

Asn Ile Lys Lys Ser Leu Gln Glu His Leu Pro Asp Val Val Tyr
245 250 255

Asn Ala Gly Thr Asp Ile Leu Glu Gly Asp Arg Leu Gly Gly Leu Ser 260 265 270

Val Arg Gly Arg Arg Val Pro Ile Leu Met Val Thr Ser Gly Gly Tyr 290 295 300

Gln Lys Arg Thr Ala Arg Ile Ile Ala Asp Ser Ile Leu Asn Leu Phe 305 310 315 320

Gly Leu Gly Leu Ile Gly Pro Glu Ser Pro Ser Val Ser Ala Gln Asn 325 330 335

Ser Asp Thr Pro Leu Leu Pro Pro Ala Val Pro

340 345

<210>	3				
<211>	21				
<212>	RNA				
<213>	Artificial Sequence				
	•				
<220>					
<223>	Completely synthetic oligonucleotide				
<400>	3				
	ıcugu uugagegugu g	21			
<210>	4				
<211>	23				
<212>	RNA				
<213>	Artificial Sequence				
	•				
<220>					
<223>	Completely synthetic oligonucleotide				
<400>	4				
aauggg	gcaug agcgagacuu aac	23			
<210>	5				
<211>	21				
<212>	RNA				
<213>	Artificial Sequence				
<220>					
<223>	Completely synthetic oligonucleotide				
<400>	5				
aacuca	agaca caccgcugcu u	21			
<210>	6				
<211>	21				
<212>	RNA				
<213>	Artificial Sequence				
<220>					
<223>	Completely synthetic oligonucleotide				
<400>	6				
aacuga	agaau uggagaggac a	21			
<210>					
<211>	21				
<212>					
<213>	Artificial Sequence				
<220>					
<223>	Completely synthetic oligonucleotide				
<400>		0.1			
caaaga	acaaa cucgcacaca a	21			

```
<210> 8
<211> 23
<212> RNA
<213> Artificial Sequence
<220>
<223> Completely synthetic oligonucleotide
acccguacuc gcucugaauu gaa
                                                                    23
<210> 9
<211> 21
<212> RNA
<213> Artificial Sequence
<220>
<223> Completely synthetic oligonucleotide
<400> 9
                                                                    21
gagucugugu ggcgacgaaa a
<210> 10
<211> 21
<212> RNA
<213> Artificial Sequence
<220>
<223> Completely synthetic oligonucleotide
<400> 10
gacucuuaac cucuccugua a
                                                                    21
<210> 11
<211> 19
<212> DNA
<213> Artificial Sequence
<220>
<223> Completely synthetic oligonucleotide
<400> 11
cctcaggcgg gtaccagaa
                                                                    19
<210> 12
<211> 24
<212> DNA
<213> Artificial Sequence
<220>
<223> Completely synthetic oligonucleotide
<400> 12
                                                                    24
caggccaaac agattaagta tgga
<210> 13
<211> 21
```

```
<212> DNA
<213> Artificial Sequence
<223> Completely synthetic oligonucleotide
<400> 13
                                                                   21
cgcacagccc gcatcattgc t
<210> 14
<211> 15
<212> PRT
<213> Artifical Sequence
<220>
<223> Completely synthetic
<400> 14
Met Leu His Thr Thr Gln Leu Tyr Gln His Val Pro Glu Thr Arg
<210> 15
<211> 12
<212> PRT
<213> Homo sapiens
<400> 15
Ala Ala Gly Gly Gly Cys Cys Gly Cys Gly Gly Cys
<210> 16
<211> 10
<212> PRT
<213> Homo sapiens
<400> 16
Gly Cys Gly Gly Ala Gly Cys Gly Gly Gly
1
                                    10
<210> 17
<211> 15
<212> PRT
<213> Homo sapiens
<400> 17
Gly Gly Cys Ala Gly Ala Gly Cys Gly Ala Gly Ala Cys Cys
                                    10
<210> 18
<211> 15
<212> PRT
```

<213> Homo sapiens

<212> PRT

<213> Homo sapiens